**Green/Duwamish River Watershed Pollutant Loading Assessment**
**Key Messages for Public Roll-Out (August 2014)**
**DRAFT 8/20/2014**

**Ecology and EPA are developing a Pollutant Loading Assessment (PLA) to understand the overall health of the Green/Duwamish watershed, including water, fish tissue and sediment, and to reduce ongoing sources of pollution in the watershed.**

- Ecology and EPA's efforts to restore water quality to the Green/Duwamish watershed are aimed at protecting human health and the environment.
- The PLA will use a watershed-based model to track the cumulative impact of pollution, predict short and long-term improvements in water and sediment quality, and predict fish tissue quality over time.
- The PLA will help identify sources of pollution to the watershed and inform targets and strategies for reducing those sources of pollution.

**The PLA will support and enhance Ecology and EPA's current efforts to clean up the Lower Duwamish Waterway (LDW).**

- Existing sediment data and models completed for LDW cleanup studies indicate that LDW sediments will still exceed target levels after cleanup because of pollutant concentrations in sediment coming from the broader Green/Duwamish River Watershed. The PLA will help determine how significant the watershed sources may be.
- EPA's LDW in-waterway cleanup will significantly improve sediment quality, but the success of the cleanup relies in part on cleaner sediments from upstream in the Green/Duwamish watershed depositing on the LDW over time. (LDW Proposed Plan, Feb. 2013)
- By identifying strategies to reduce sources of pollution throughout the watershed, the PLA will help improve the effectiveness of the LDW in-waterway cleanup.

**Ecology plans to use an inclusive outreach and involvement process during development of the PLA, and encourages participation from government agencies, businesses and the general public.**

- Ecology is establishing a Technical Advisory Committee (TAC) for public or quasi-public organizations that will meet frequently, and will support Ecology's efforts to develop the PLA through an open, interactive process.
- Ecology will sponsor larger meetings of Interested Parties to allow broad participation in development of the PLA.
- A Steering Committee with representatives from Ecology and EPA water and cleanup programs will consider the input and recommendations of the TAC and Interested Parties groups when making project decisions.

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**Background Information**

EPA published the LDW Proposed Plan (Feb. 2013) for public comment in the spring of 2013, and anticipates that the Record of Decision will be finalized in late 2014.

- Ecology is leading efforts to control ongoing sources of contamination to the LDW.
- EPA and Ecology believe that LDW sediments will continue to exceed target levels even after cleanup because of pollutant concentrations present in sediment coming from the broader Green/Duwamish River Watershed.

As required by Section 303(d) of the Clean Water Act, Ecology identifies all impaired waters within the State of Washington and develops plans that, when implemented, will restore those impaired waters.

- Ecology has identified water, fish tissue and sediment impairments throughout the Green/Duwamish watershed on the state's 303(d) list. These are impairments to aquatic life and fishing/shellfish harvesting uses that are protected by the state's water quality standards.
- EPA and Ecology believe that some, but not all, of these impairments may be fully resolved, and the beneficial uses restored, by the cleanup actions currently taking place or planned in the LDW.

The PLA is an interim restoration strategy for improving water quality, not a Total Maximum Daily Load (TMDL).

- In its latest 303(d) list, Ecology did not prioritize the Green River or the Duwamish River for TMDL development.
- After completion of the PLA, Ecology will re-evaluate whether or not to prioritize development of TMDLs in the Green/Duwamish watershed in the near-term, or whether to pursue additional interim restoration strategies.

Ecology will continue to implement its Source Control Strategy for the LDW. EPA will proceed with the LDW in-waterway remedy. The PLA augments these efforts.

- Ecology is revising the 2012 draft strategy in response to public comments. Ecology and its source control partners are developing implementation plans to be attached as appendices to the revised source control strategy. A revised and fully appended source control strategy is expected to be available in early 2015.
- The LDW in-waterway cleanup will proceed under the LDW Record of Decision. The PLA will not interfere with the anticipated schedule for implementing the remedial actions. The PLA tool will be available for use to help evaluate post-cleanup LDW monitoring data and the effectiveness of the sediment remedy.
- ADD UPDATED LDW SCHEDULE (BASED ON ROD).

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**Frequently Asked Questions (INTERNAL USE ONLY)**

*Why are Ecology and EPA developing a PLA?*
The PLA will take a broad look at watershed health in the Green/Duwamish river system. It will look at sources of pollution and the pathways that pollution takes to reach the river, and identify how those sources and pathways will impact water, sediments and fish tissues. The PLA will help identify strategies for reducing pollution in the watershed in order to improve the effectiveness of the LDW in-waterway cleanup and associated source control activities. The PLA will provide a technical framework to support discharge permitting decisions.

*How does the PLA influence the cleanup of the LDW?*
EPA and Ecology believe that LDW sediments will continue to exceed target levels even after cleanup because of pollutant concentrations present in sediment coming from the broader Green/Duwamish watershed. The PLA will help identify and predict sources and pathways of contamination and develop targets and strategies for reducing those sources and controlling those pathways. Given the influence of lateral sources within the LDW and upstream loading from the Green/Duwamish River, the PLA project will help protect investments being made in sediment remediation.

*Is this a TMDL?*
The PLA is not a TMDL. It is part of an interim strategy for improving water quality. After completing the PLA, Ecology will evaluate whether or not to prioritize development of TMDLs for the Green/Duwamish Watershed in the near-term. The PLA project will not result in an assignment of load and wasteload allocations.

*How does this address human health criteria?*
The PLA will evaluate loading of pollutants that pose risks to human health due in part to bioaccumulation in the food chain. The PLA will help determine the relative contributions of permitted or concentrated sources and diffuse unregulated sources of these toxics in one of Washington State's urbanized watersheds. The PLA could provide a technical basis for using the regulatory implementation tools that are expected to be identified through rule-making associated with human health criteria revisions. The PLA provides a technical tool to assist Ecology and others to adaptively manage source control activities over time such that measurable progress is made towards achieving human health-based water quality criteria. The PLA might provide an estimate of the best quality of aquatic habitat and fish/shellfish harvesting uses that can be attained in the LDW, forming part of a basis for potential future changes to LDW designated uses.

*How does this work relate to the Governor's Clean Water Initiative?*
The PLA will be developed in parallel with the Clean Water Initiative and use of the PLA over time will likely implement results of the Clean Water Initiative. The projects, however, are not necessarily dependent upon one another. The PLA for the Green/Duwamish River is a watershed-specific analysis designed to tackle toxic chemicals that are present in permitted discharges as well as in diffuse

unregulated sources. An example of a diffuse unregulated source is PCBs in exterior building paint and caulking. The PLA provides an opportunity to quantify different sources and pathways to support the development of strategies aimed to 1) address specific high-priority sources, 2) get toxic chemicals out of consumer products, and 3) evaluate progress toward attaining standards over time.

*How is this work funded?*
Ecology is the lead agency in developing the PLA, and EPA has provided funding for an EPA contractor to initiate the project (2012 = $120,000, 2013-2014=xx). Ecology is seeking future funding for the PLA in the 2015-2017 State budget process.